

## Ignition interlock devices for alcohol-related offenses

Literature review updated March 2014.

As part of WSIPP's research approach to identifying evidence-based programs and policies, WSIPP determines "what works" (and what does not work) to improve outcomes using an approach called meta-analysis. For detail on our methods, see our [technical documentation](#). At this time, WSIPP has not yet calculated benefits and costs for this topic.

**Program Description:** Ignition interlock devices are installed on a motor vehicle typically for offenders who have been convicted of alcohol-related offenses (e.g., driving under the influence (DUI)). The device operates like a breathalyzer and when alcohol above a specified threshold is detected in the breath, the vehicle will not start. Most devices require periodic breath samples once the car has started. Offenders are typically required to pay for the cost of the ignition interlock device. Interlock devices are typically required for 12 to 24 months.

For studies included in this meta-analysis, ignition interlock devices were used for repeat DUI offenders and the devices were monitored by an executive agency (e.g., department of motor vehicles), not by the courts.

We examined the effectiveness of the devices once removed from the vehicle and found that the effect size decreased by 38 percent. That is, ignition interlock devices were more effective while on the vehicle (ES = -0.641, p value = 0.01) and less effective once removed (ES = -0.398, p value = 0.06).

### Meta-Analysis of Program Effects

Outcomes measured	Primary or secondary participant	No. of effect sizes	Treatment N	Unadjusted effect size (random effects model)		Adjusted effect sizes and standard errors used in the benefit-cost analysis					
						First time ES is estimated			Second time ES is estimated		
				ES	p-value	ES	SE	Age	ES	SE	Age
Alcohol-related offenses	Primary	4	3363	-0.467	0.004	-0.467	0.161	39	-0.467	0.161	49

### Citations Used in the Meta-Analysis

- Beck, K.H., Rauch, W.J., Baker, E.A., & Williams, A.F. (1999). Effects of Ignition Interlock License Restrictions on Drivers With Multiple Alcohol Offenses: A Randomized Trial in Maryland. *American Journal of Public Health*, 89, 11.
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Printed on 12-03-2015

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